

CLAIMS

What is claimed is:

1. An interactive language learning method capable of speech recognition, the method at least comprising the following steps:
 - 5 accessing and playing language voice data;
 - inputting a user's practice voice signal;
 - performing speech recognition on the practice voice signal to generate speech recognition data; and
 - comparing the speech recognition data and the language voice data to generate a similarity value, wherein according to the similarity value, correctness of the user's practice voice signal is determined.
- 10 2. The interactive language learning method capable of speech recognition according to claim 1, wherein before the step of accessing the language voice data, the method further comprises the step of:
 - 15 setting a language learning mode to be a repetition mode or a conversation mode.
- 15 3. The interactive language learning method capable of speech recognition according to claim 1, wherein in the step of accessing the language voice data, any language voice data are accessed from a data storage medium.
- 20 4. The interactive language learning method capable of speech recognition according to claim 3, wherein in the step of accessing the language voice data, some language voice data are accessed from the data storage medium one-by-one according to the course schedule.
- 25 5. The interactive language learning method capable of speech recognition according to claim 1, wherein the language voice data comprises a first

speech and a second speech, and the second speech is a translation of the first speech.

6. The interactive language learning method capable of speech recognition according to claim 5, wherein the first speech is in English, and the second speech is in Chinese.
7. The interactive language learning method capable of speech recognition according to claim 1, wherein in the step of playing the language voice data, a speaker is used for playing the language voice data.
8. The interactive language learning method capable of speech recognition according to claim 1, wherein in the step of playing the language voice data, when the language voice data comprises a first speech and a second speech, the second speech is played first, and then the first speech is played.
9. The interactive language learning method capable of speech recognition according to claim 8, wherein the first speech is in English, and the second speech is in Chinese.
10. The interactive language learning method capable of speech recognition according to claim 1, wherein before the step of inputting the user's practice voice signal, the method further comprises the following steps: waiting for a period; and playing the language voice data repeatedly if the user does not input the practice voice signal in the period.
11. The interactive language learning method capable of speech recognition according to claim 10, wherein the period is five seconds.
12. The interactive language learning method capable of speech recognition according to claim 1, wherein a microphone is used for inputting the user's practice voice signal.

13. The interactive language learning method capable of speech recognition according to claim 1, wherein the language voice data is a question and an answer, the question is used for playing, and the answer is used for comparison with the user's practice voice signal.

5 14. The interactive language learning method capable of speech recognition according to claim 13, wherein the question is an English question or a Chinese question.

15. The interactive language learning method capable of speech recognition according to claim 13, wherein the answer is an English answer or a
10 Chinese answer.

16. The interactive language learning method capable of speech recognition according to claim 1, wherein in the step of performing speech recognition on the practice voice signal, the following steps are further comprised: transforming the practice voice signal into a speech waveform; and
15 accessing at least one characteristic parameter value from the speech waveform to generate speech recognition data.

17. The interactive language learning method capable of speech recognition according to claim 1, wherein in the step of comparing the speech recognition data and the language voice data, the following steps are further
20 comprised:

transforming the practice voice signal and the language voice data into speech waveforms;
accessing at least one characteristic parameter value from each of the speech waveforms, and then determining whether the characteristic
25 parameter values are similar to each other to generate a similarity value.

18. The interactive language learning method capable of speech recognition

according to claim 1, wherein after the step of comparing the speech
recognition data and the language voice data, the method further comprises:
comparing the similarity value and a predetermined adjustment value;
finishing the language learning if the similarity value is higher than the
predetermined adjustment value; and
generating an error message to ask the user to re-input the practice voice
signal if the similarity value is lower than the predetermined adjustment
value.

19. The interactive language learning method capable of speech recognition

according to claim 18, wherein the predetermined adjustment value can
adjust and compare the ratio of the similarity value in advance and the ratio
can be a high/middle/low comparison correctness ratio.

20. The interactive language learning method capable of speech recognition

according to claim 1, wherein after the step of comparing the speech
recognition data and the language voice data, the method further comprises
a step of storing a correct/erroneous record of the language voice data
practiced by the user, and recording a serial number, number of practices, or
practice time of the language voice data.

21. The interactive language learning method capable of speech recognition

according to claim 20, wherein after the step of storing, comparing and
recording, the method further comprises the step of compiling all
correct/erroneous records of the language voice data practiced by the user,
and after grading, a display device displays the grading result.

22. The interactive language learning method capable of speech recognition

according to claim 21, wherein the recorded serial number, number of
practices, or practice time of the language voice data are reference data for

repeated practice in the future.

23. The interactive language learning method capable of speech recognition according to claim 22, wherein as the reference data of the repeated practice, the serial number of the language voice data with more errors has a higher priority for access and play.

5 24. The interactive language learning method capable of speech recognition according to claim 22, wherein as the reference data of the repeated practice, the serial number of the language voice data for practice time with a longer interval has a higher priority for access and play.